



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,601	10/22/2003	Sinikka Sarkkinen	061604-0261	3866
30542 7590 01/17/2008 FOLEY & LARDNER LLP P.O. BOX 80278 SAN DIEGO, CA 92138-0278				
			EXAMINER RUSSELL, WANDA Z	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 01/17/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/689,601

Applicant(s)

SARKKINEN, SINIKKA

Examiner

Wanda Z. Russell

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 13 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. **Claims 1-8, 10-11, and 13-20** are rejected under 35 U.S.C. 102(b) as being anticipated by Raith (U.S. Patent 5,930,706).

For **claim 1**, Raith teaches a method comprising:

broadcasting (col. 20, line 63) a service notification (system-related information, col. 20, line 62) from a data network (system, col. 20, line 62) in response to a network-initiated creation of a service context (short message, col. 21, lines 5-6); and

switching (acquisition, col. 21, line 1) a connection state (sleep mode, col. 21, line 1. For PCH-paging and sleep mode operation, see col. 5, lines 1-5, and col. 23, lines 25-32) of a terminal device (mobile station, col. 20, line 63) to a dedicated channel state (BCCH, col. 20, line 62, and col. 21, line 36. Note that BCCH is part of DCCH, See Fig. 3) in which a dedicated physical channel is allocated to said terminal device (col. 21, line 2), after reception of configuration parameters (DCCH structure parameters, col. 21, line 7) for a broadcast or multicast service to said terminal device from a related control channel (DCCH, col. 21, line 2. For DCCH, see col. 1, line 12).

For **claim 2**, Raith teaches a method according to claim 1, wherein said broadcast or multicast service is an Multimedia Broadcast/Multicast Service (various data, col. 6, line 22; short messages, col. 21, lines 5-6; and point-to-multipoint, col. 21, line 5).

For **claim 3**, Raith teaches a method according to claim 1, wherein said notification triggers said terminal device to listen to said related control channel (col. 21, lines 50-51).

For **claim 4**, Raith teaches a method according to claim 1, wherein said notification allows said terminal device not to respond (stay in sleep mode, col. 21, line 53) to the received service indication (col. 21, lines 52-54).

For **claim 5**, Raith teaches a method according to claim 1, wherein said switching is performed after reception of said configuration parameters from said related control channel (col. 21, lines 1-3).

For **claim 6**, Raith teaches a method according to claim 5, wherein said state switching is ordered by a network element (mobile station, col. 5, lines 1-5) based on said configuration parameters.

For **claim 7**, Raith teaches a method according to claim 6, wherein said state switching order is issued to said terminal device and said network element derives the current state of said terminal device based on said state switching order (col. 5, lines 1-5).

For **claim 8**, Raith teaches a method according to claim 1, wherein said connection state is switched to said dedicated channel (BCCH, col. 20, line 62, and col. 21, line 36) state from a paging channel state (PCH, col. 21, line 15, and col. 5, lines 1-5).

Art Unit: 2616

For **claim 10**, Raith teaches a method according to claim 1, wherein said service notification caused by a network-initiated activation of a service data transmission (col. 20, lines 61-63).

For **claim 11**, Raith teaches a system (method and apparatus, col. 5, line 61) comprising:

broadcasting unit (communication system, col. 6, line 59, and col. 20, lines 62-63) for broadcasting a service notification (system-related information, col. 20, line 62) from a network (system, col. 20, line 62) as a result of a network-initiated creation of a service context (short message, col. 21, lines 5-6); and

network unit (communication system, col. 6, line 59) for switching (acquisition, col. 21, line 1) a connection state (PCH, col. 21, line 15, and sleep mode, col. 21, line 1. For PCH-paging and sleep mode operation, see col. 5, lines 39-41) of a terminal device to a dedicated channel state (BCCH, col. 20, line 62, and col. 21, line 36. Note that BCCH is part of DCCH, See Fig. 3) in which a dedicated physical channel is allocated to said terminal device (col. 21, line 2), after reception of configuration parameters (DCCH structure parameters, col. 21, line 7) for a broadcast or multicast service to said terminal device from a related control channel (DCCH, col. 21, line 2. For DCCH, see col. 1, line 12).

For **claim 13 and 15**, they are system (apparatus, col. 5, line 65) claims corresponding to method claim 9, therefore it is rejected for the same reason above.

For **claim 14**, it is a system (apparatus, col. 5, line 65) claim corresponding to method claim 8, therefore it is rejected for the same reason above.

Art Unit: 2616

For **claim 16, 18, and 20**, they are means for claims corresponding to system claim 11, therefore they are rejected for the same reason above.

For **claim 17, and 19**, they are unit claims corresponding to system claim 11, therefore they are rejected for the same reason above.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 9 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Raith (U.S. Patent 5,930,706), in view of Chen (Pub No. US 2002/0126636).

For **claim 9**, Raith substantially teaches a method claimed as applied above (see claim 1 and 8). In addition, Raith substantially teaches a method according to claim 8, wherein said connection state is switched from a CELL-PCH (col. 21, line 15) state to a CELL-DCH (BCCH, col. 21, line 36) of a UMTS radio access network.

However, Raith fails to specifically teach UMTS radio access network.

Chen teaches UMTS radio access network (Title, and [0003]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Raith with Chen to obtain the invention as specified, for comprising a Core Network-operating Multi-Protocol Label Switching.

For **claim 12**, Raith substantially teaches the system claimed as applied above (see claim 11).

However, Raith fails to specifically teach GGSN.

Chen teaches a system, wherein said broadcasting means is a GGSN (Fig. 1).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Raith with Chen to obtain the invention as specified, for more choices of services, in the communication system.

Response to Amendment

4. Applicant's amendment filed May 22, 2007 has been received and considered.

Response to Arguments

5. Applicant's arguments filed November 13, 2007 have been fully considered but they are not persuasive.

Applicant argues that the claimed service notification is broadcast from the data network, while the DCCH selection appears to be a cell selection, where the mobile station monitors its PCH slot (col. 23, lines 25-32), therefore the DCCH selection cannot be regarded as broadcasting a service notification from a network as claimed.

In response, the Examiner respectfully disagrees.

From col. 23, lines 25-32 of Raith, it states that "it should be noted that although a mobile station complying with IS-136 will "wake up" to read its PCH slot every nth hyperframe ..., the PCH slot in any particular nth hyperframe may be "stolen" for use by another SPACH subchannel since slots are assigned to SPACH subchannels on a dynamic basis and in accordance with capacity requirements."

~~Note that~~

a. The DCCH is a channel set up by the data network (including base station and terminal device) to carry different kinds of information to the terminal device. See col. 20, lines 61-63: "BCCH (note: part of DCCH) carrying system-related information which is broadcast to all mobile stations..." col. 4, lines 46-56: "DCCH which may be defined alongside the DTCH specified in IS-54B..." and col. 4, lines 12-16: "base station and mobile station..."

b. The PCH is part of DCCH, see Fig. 3, and according to col. 23, lines 25-32 described above; col. 5, lines 1-5; and col. 21, lines 1-2, PCH is used to broadcast service notification in sleep mode.

6. Applicant argues that the examiner misinterprets the claimed switching of a connecting state to a dedicated channel state, and the point-to-multipoint service described in Raith has nothing to do with the information provided by the DCCH channel. Moreover, it should be noted that the DCCH channel described in Raith is a digital control channel for conveying PCH slots (paging slots) and thus cannot be regarded as a dedicated channel (point-to-point transmission).

In response, the Examiner respectfully disagrees.

The examiner added more details from more paragraphs to show that Raith teaches a method comprising:

broadcasting (col. 20, line 63) a service notification (system-related information, col. 20, line 62) from a data network (system, col. 20, line 62) in response to a network-initiated creation of a service context (short message, col. 21, lines 5-6); and

switching (acquisition, col. 21, line 1) a connection state (sleep mode, col. 21, line 1. For PCH-paging and sleep mode operation, see col. 5, lines 1-5, and col. 23, lines 25-32) of a terminal device (mobile station, col. 20, line 63) to a dedicated channel state (BCCH, col. 20, line 62, and col. 21, line 36. Note that BCCH is part of DCCH, See Fig. 3) in which a dedicated physical channel is allocated to said terminal device (col. 21, line 2), after reception of configuration parameters (DCCH structure parameters, col. 21, line 7) for a broadcast or multicast service to said terminal device from a related control channel (DCCH, col. 21, line 2. For DCCH, see col. 1, line 12).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda Z. Russell whose telephone number is (571)

Art Unit: 2616

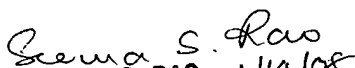
270-1796. The examiner can normally be reached on Monday-Thursday 9:00-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WZR




SEEMA S. RAO 1/14/08
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600